

Attorney's Docket No. 9065-11

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Caputo et al.

Serial No.: 10/038,554

Filed: January 2, 2002

For: SYMMETRIC, MONOFUNCTIONALISED POLYMETHINE DYES LABELLING
REAGENTS

Group Art Unit: 1626

Confirmation No. 3035

April 26, 2002

Commissioner for Patents
Washington, DC 20231

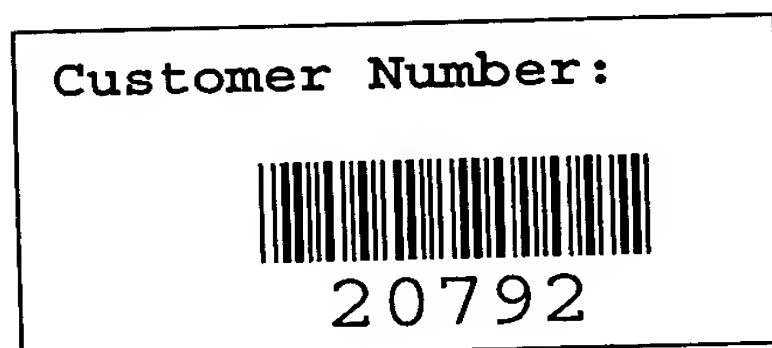
INFORMATION DISCLOSURE STATEMENT

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Respectfully submitted,



F. Michael Sajovec
Registration No. 31,793

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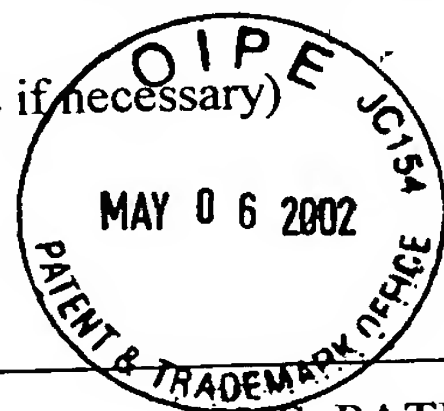
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FORM PTO-1449 U.S. Department of Commerce
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Attorney Docket Number
9065-11

LIST OF DOCUMENTS CITED BY APPLICANT

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Applicants: Caputo et al.

Filing Date: January 2, 2002

Group
Unknown

U. S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	3,282,932	11/1966	Lincoln et al.	260	240.4	
	2.	3,397,981	8/1968	Lincoln et al.	96	102	
	3.	3,403,026	9/1968	Oliver et al.	96	105	
	4.	3,408,195	10/1968	Oliver	96	105	
	5.	3,656,960	4/1972	Oliver	96	124	
	6.	4,981,977	1/1991	Southwick et al.	548	455	
	7.	5,627,027	5/1997	Waggoner	435	6	
	8.	6,002,003	12/1999	Shen et al.	544	232	
	9.	6,027,709	02/2000	Little et al.	424	1.65	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes No
	10.	640,127	7/1950	GB	2(iii)	C2a, C2b, C3,5	N/A
	11.	WO 99/31181	6/1999	PCT	C09B	23/06	Yes

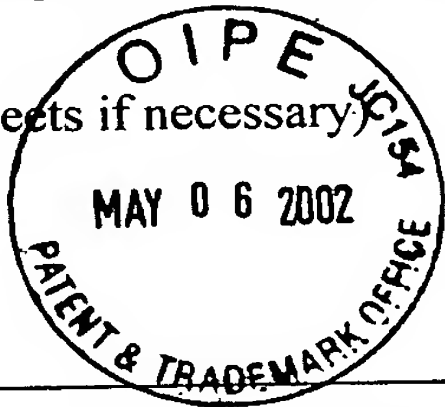
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	12.✓	Babichev et al.; "Benzothiazolylalkyl Carbinols" translated from <i>Zhurnal Obshchei Khimii</i> 32:3 850-857 (1962).
	13.✓	Babichev; "Condensation of o-Aminobenzenethiol with Lactones" translated from <i>Zhurnal Obshchei Khimii</i> 33:9 2942-2948 (1963).
	14.✓	Brooker; "Chapter II - Sensitizing and Desensitizing Dyes" <i>The Theory of the Photographic Process</i> 198-232.
	15.✓	Dähne; "Spectral Sensitization and Electronic Structure of Organic Dyes" <i>Photographic Science and Engineering</i> 23:4 219-239 (1979).
	16.✓	Dieckmann et al.; "Ueber Chlormalonaldehyd, [2-Chlorpropen (2)-ol(3)-al(1)]" <i>Berichte</i> 4638-4639 (1904).

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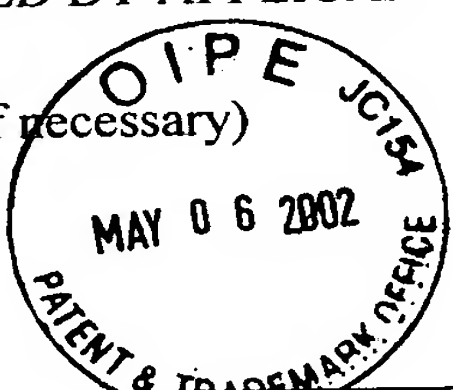
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FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary)		Attorney Docket Number 9065-11	RECEIVED MAY 08 2002 TECH CENTER 1600/2900	Serial No. 10/038,554
		Applicants: Caputo et al		Group Unknown
		Filing Date: January 2, 2002		
33. ✓	Pomogaev et al.; "Meso-Bromo-Substituted Tricarbocyanines with Cyclic Fragments in the Conjugation Chain" translated from <i>Zhurnal Organiches koi Khimii</i> 17:1 167-169 (1981).			
34. ✓	Reynolds et al.; "Stable Heptamethine Perylium Dyes that Absorb in the Infrared" <i>J. Org. Chem.</i> 42:5 885-888 (1977).			
35. ✓	Strekowski et al.; "Facile Derivatizations of Heptamethine Cyanine Dyes" <i>Synthetic Communications</i> 22:17 2593-2598 (1992).			
36. ✓	Strekowski et al.; "Substitution Reactions of a Nucleofugal Group in Heptamethine Cyanine Dyes. Synthesis of an Isothiocyanato Derivative for Labeling of Proteins with a Near-Infrared Chromophore" <i>J. Org. Chem.</i> 57 4578-4580 (1992).			
37. ✓	Sturmer et al.; "Table of Contents for Chapter 8 - Syntheses and Properties of Cyanine and Related Dyes" <i>Special Topics in Heterocyclic Chemistry</i> 441 (1977).			
38. ✓	Yu et al.; "Cyanine dye dUTP analogs for enzymatic labeling of DNA" <i>Nucleic Acids Research</i> 22:15 3226-3232 (1994).			
39. ✓	Zhu et al.; "Directly labeled DNA probes using fluorescent nucleotides with different length linkers" <i>Nucleic Acids Research</i> 22:16 3418-3422 (1994).			
40. ✓	Zollinger; "Color Chemistry" 51-69, 361-396 (1987).			

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17.	Fry; "Chapter 15 - Cyanine Dyes and Related Compounds" <i>Rodd's Chemistry of Carbon Compounds, Second Edition</i> 4(b) 369- (1977).		
18.	Fry; "Chapter 15 - Cyanine Dyes and Related Compounds" <i>Supplements to the 2nd Edition of Rodd's Chemistry of Carbon Compounds</i> 267-268 (1985).		
19.	Hamer; "Some Unsymmetrical Pentamethincyanine Dyes" <i>J. Chem. Soc.</i> 32 32-37 (1969).		
20.	Imasaka et al.; "Semiconductor Laser Fluorimetry in the Near-Infrared Region" <i>Anal. Chem.</i> 56 1077-1079 (1984).		
21.	Imasaka et al.; "Diode Lasers and Practical Trace Analysis" <i>Analytical Chemistry</i> 62:6 363A-371A (1990).		
22.	Kiprianov; "Influence of the Solvent on the Colour of Dyes (Solvatochromism)" <i>Russian Chemical Reviews</i> 29:11 618-626 (1960).		
23.	Kiprianov et al.; "The Colour of Dyes and Steric Hindrance in their Molecules" <i>Russian Chemical Reviews</i> 35:5 361-373 (1966).		
24.	Kiprianov et al.; "Absorption Spectra of Organic Dyes Containing Two Chromophores" <i>Russian Chemical Reviews</i> 40:7 594-607 (1971).		
25.	Lindsey et al.; "Visible Light-Harvesting in Covalently-Linked Porphyrin-Cyanine Dyes" <i>Tetrahedron</i> 45:15 4845-4866 (1989).		
26.	Mank et al.; "Visible Diode Laser Induced Fluorescence Detection in Liquid Chromatography after Precolumn Derivatization of Thiols" <i>Anal. Chem.</i> 65 2197-2203 (1993).		
27.	Mank et al.; "Visible Diode Laser-Induced Fluorescence Detection in Liquid Chromatography after Precolumn Derivatization of Amines" <i>Anal. Chem.</i> 67 1742-1748 (1995).		
28.	Mikhailenko et al.; "Effect of Polar Substituents and the Length of the Polymethine Chain on the Color of Cyanine Dyes of the Benzo [c,d] Indole Series" translated from <i>Zhurnal Organicheskoi Khimii</i> 18:2 435-441 (1982).		
29.	Mujumdar et al.; "Cyanine Dye Labeling Reagents Containing Isothiocyanate Groups" <i>Cytometry</i> 10 11-19 (1989).		
30.	Mujumdar et al. "Cyanine Dye Labeling Reagents" Sulfoindocyanine Succinimidyl Esters" <i>Bioconjugate Chemistry</i> 4:2 105-111 (1993).		
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32.	Narayanan et al.; "A New Method for the Synthesis of Heptamethine Cyanine Dyes: Synthesis of New Near-Infrared Fluorescent Labels" <i>J. Org. Chem.</i> 60 2391-2395 (1995).		

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